

PROCEEDINGS
OF THE
CALIFORNIA ACADEMY OF SCIENCES
FOURTH SERIES

VOL. XI, Nos. 22 AND 23, pp. 655-700

AUGUST 22, 1923

XXII

**REPORT OF THE PRESIDENT OF THE ACADEMY
FOR THE YEAR 1922**

By C. E. GRUNSKY
President of the Academy

The year just completed has been another year of satisfactory progress with several noteworthy events to the credit of the Academy as will appear from the following concise review of the year's work.

The net increase in membership has been 38. There were 1030 members on January 1, 1923. There were 120 new members admitted during 1922. The Academy lost by death 18, by resignation 28, and it dropped for arrearages 36.

The membership as of January 1, 1923, was made up of:

Patrons	13
Honorary Members	25
Life Members	84
Fellows	23
Members	884
Total	1029

The Academy carries on its list of patrons the following names:

	<i>Living</i>
William B. Bourn	A. Kingsley Macomber
George C. Beckley	John W. Mailliard
William H. Crocker	Joseph Mailliard
Peter F. Dunne	M. Hall McAllister
Barton Warren Evermann	Ogden Mills
Herbert Fleishhacker	William C. Van Antwerp
Joseph D. Grant	

Deceased

William Alvord
 Charles Crocker
 John W. Hendrie
 Charlotte Hosmer

James Lick
 Alexander F. Morrison
 Amarish Pierce
 Ignatz Steinhart

Those who were called by death in 1922 are as follows:

Bentley, Charles H.....	Member	December 30, 1922
Branner, Dr. John C.....	Fellow	March 1, 1922
Brown, Herbert H.....	Member.....	July 31, 1922
Conolley, Mrs. E. D.....	Member.....	February 22, 1922
Field, George R.....	Member.....	May 1, 1922
Frankl, A.	Member.....	November 20, 1922
Hanify, John R.....	Life	May 6, 1922
Hill, Harry	Member	September, 1921
Niebling, E. T.....	Member.....	September 27, 1922
Price, William W.....	Life	November 9, 1922
Raymond, Albert	Member	September 22, 1922
Reynolds, Laurence R.....	Member.....	October 9, 1922
Taussig, Rudolph J.....	Member	January 24, 1922
Twiggs, John W.....	Life	January 30, 1922
Waterhouse, Mrs. Amelia A.....	Member.....	October 28, 1922
Weinstock, Colonel Harris.....	Member	August 22, 1922
Willard, Charles W.....	Member.....	December 7, 1922
Wolfe, Edward I.....	Member	January 25, 1922

The Academy published in 1922 the following papers and reports, among which the contribution of Dr. John Van Denburgh, entitled "The Reptiles of Western North America," in two volumes, with an aggregate of 1028 pages and 128 half-tone plates, stands out as a notable achievement:

FOURTH SERIES OF THE PROCEEDINGS

- Vol. XI, No. 18, pp. 399-526—FOSSIL CHITONS OF WESTERN NORTH AMERICA, by S. Stillman Berry.
- Vol. XI, No. 19, pp. 527-601—TERTIARY AND QUATERNARY HISTORY OF THE PETALUMA, POINT REYES AND SANTA ROSA QUADRANGLES, by Roy E. Dickerson.
- Vol. XI, No. 20, pp. 603-610—REPORT OF THE PRESIDENT OF THE ACADEMY FOR THE YEAR 1921, by C. F. Grunsky.
- Vol. XI, No. 21, pp. 611-653—REPORT OF THE DIRECTOR OF THE MUSEUM FOR THE YEAR 1921, by Barton Warren Evermann.

Occasional papers:

- No. 10, Vol. I, pp. 1-611, and Vol. II, pp. 613-1028, with 128 half-tone plates—THE REPTILES OF WESTERN NORTH AMERICA: Vol. I, LIZARDS. Vol. II, SNAKES AND TURTLES, by John Van Denburgh.

Free lectures have been delivered at the stated meetings of the Academy in 1922, as follows:

- JANUARY 4. The Conservation of Marine Life of the Pacific (illustrated), by Dr. Barton Warren Evermann, Director, California Academy of Sciences.
- MARCH 1. Faunal and Floral Migration Routes to the Philippines, by Dr. Roy E. Dickerson, Honorary Curator, Department of Invertebrate Paleontology, California Academy of Sciences.
- APRIL 5. The Expedition of the California Academy of Sciences to the Galapagos Islands (illustrated), by Mr. Joseph R. Slevin, Assistant Curator, Department of Herpetology, California Academy of Sciences.
- MAY 3. Some Birds of Ventura County, California (illustrated), by Dr. G. Dallas Hanna, Curator, Department of Invertebrate Paleontology.
- JUNE 7. The Life History and Growth of the Pismo Clam (illustrated), by Dr. F. W. Weymouth, Assistant Professor of Physiology, Stanford University.
- JULY 5. The Recent Salt Lake City Meeting of the Pacific Division, American Association for the Advancement of Science, by Dr. Barton Warren Evermann, Retiring President, Pacific Division American Association for the Advancement of Science.
- AUGUST 2. General Features of the Distribution of Plants in California, by Miss Alice Eastwood, Curator, Department of Botany, California Academy of Sciences.
- SEPTEMBER 6. The Recent Expedition to the Islands off the West Coast of Lower California, by Dr. G. Dallas Hanna, Curator, Department of Invertebrate Paleontology, and Mr. Frank Tose, Chief Taxidermist, California Academy of Sciences.
- OCTOBER 4. The Netherlands East Indies, from geographical, topographical, historical, ethnological, psychological, economical and political standpoints, in the past, present and future (illustrated), by Hon. H. A. van Coenen Torchiana, Consul General of the Netherlands.
- NOVEMBER 1. Abyssinia, the Land of the Negus (illustrated), by Hon. Gerald Campbell, F. R. G. S., British Consul General.
- DECEMBER 6. The Problem of Ocean Trade Routes, by Captain I. N. Hibberd, San Francisco.¹

The Sunday afternoon lectures delivered in the Museum building in 1922 have included the following:

- JANUARY 8. Animal Life of the Apache Trail, Arizona (illustrated with motion pictures and stereopticon), by Mr. Harry S. Swarth, Curator of Birds, Museum of Vertebrate Zoology, University of California.
- JANUARY 15. The Nation's Public Hunting Grounds (illustrated), by Mr. J. W. Nelson, Assistant District Forester, Fifth District, United States Forest Service, San Francisco.
- JANUARY 22. Why the California Redwoods Should be Saved (illustrated), by Mr. R. F. Hammatt, Secretary-Manager of the California Redwoods Association, San Francisco.
- JANUARY 29. Hetch-Hetchy in Pictures (illustrated with motion pictures), by Mr. M. M. O'Shaughnessy, City Engineer, San Francisco.
- FEBRUARY 5. The Work of the United States Forest Service (illustrated), by Mr. Paul G. Redington, District Forester, Fifth District, United States Forest Service, San Francisco.

- FEBRUARY 12.** Modern Bolivia (illustrated with stereopticon slides and native music, played on the Euphonia Solo Player Piano, courtesy of the Wiley B. Allen Company), by Hon. Alberto Palacios, Consul General of Bolivia.
- FEBRUARY 19.** The Political and Financial Life of Chile (illustrated), by Hon. Marcos G. Huidobro, Consul of Chile to San Francisco.
- FEBRUARY 26.** The Scenic Features of the Southern High Sierra (illustrated), by Mr. Ansel F. Hall, Park Naturalist, Yosemite National Park.
- MARCH 5.** The Truth About Vivisection (illustrated), by Mr. Ernest Harold Baynes, General Manager, The Meriden Bird Club, Meriden, New Hampshire.
- MARCH 12.** The Republic of Mexico (illustrated), Hon. Alejandro Lubbert, Consul of Mexico.
- March 19.** The Republic of Ecuador (illustrated), by Dr. Manuel C. de Vaca, Consul General of Ecuador, and Professor of Political Science at the University of Quito.
- March 26.** Why the Navajos are a Specially Interesting Tribe of Indians (illustrated), by Dr. William E. Ritter, Director, Scripps Institution for Biological Research, University of California, La Jolla.
- April 2.** The Natural History of the Galapagos Islands (illustrated), by Mr. Joseph R. Slevin, Assistant Curator, Department of Herpetology, California Academy of Sciences.
- April 9.** Deserts East and West (illustrated), by Dr. D. T. MacDougal, Director, Department of Botanical Research, Carnegie Institution of Washington.
- April 16.** Vision—Some Facts About Our Eyes (illustrated), by Prof. Rufus L. Green, Professor of Mathematics, Stanford University.
- April 30.** How Beavers Work (illustrated), by Mr. Joseph Dixon, Economic Mammalogist, Museum of Vertebrate Zoology, University of California.
- May 14.** India (illustrated), by Mr. I. H. Morse, San Francisco.
- May 21.** The Steinhart Aquarium (illustrated), by Mr. Alvin Seale, Superintendent, Steinhart Aquarium.
- May 28.** A Perspective Glance at California Irrigation (illustrated), by Mr. Frank Adams, Professor of Irrigation Investigations, University of California.
- October 1.** The Experimental Method in Animal Psychology, by Dr. Samuel J. Holmes, Professor of Zoology, University of California.
- October 8.** Equilibration of Animals and Aviators, by Dr. Samuel S. Maxwell, Professor of Physiology, University of California.
- October 15.** The Use of Animals in the Diagnosis and Prevention of Disease, by Dr. Carl A. L. Schmidt, Associate Professor of Biochemistry, University of California.
- October 22.** Animal Experimentation, by Dr. T. D. Beckwith, Professor of Bacteriology, University of California.
- October 29.** Animal Foes of the Human Body and How to Control Them, by Dr. Charles A. Kofoid, Professor of Zoology, University of California.
- NOVEMBER 5.** What Animal Experimentation Has Done for Childhood, by Dr. E. C. Fleischner, Clinical Professor of Pediatrics, University of California.

- NOVEMBER 12. The Panama-Pacific Exposition (illustrated), by Mr. Charles B. Turrill, San Francisco.
- NOVEMBER 19. The Conservation of the Marine Life of the Pacific (illustrated with moving pictures and stereopticon slides), by Dr. Barton Warren Evermann, Director, Museum California Academy of Sciences.
- NOVEMBER 26. Discovery of the Cause of Magnetism and of Universal Gravitation (illustrated), by Captain T. J. J. See, Professor of Mathematics, United States Navy.
- DECEMBER 2. A Recent Trip to the Republic of Colombia (illustrated), by Mr. C. B. Lastreto, San Francisco.
- DECEMBER 10. Indo-China, by Mdlle. Jehanne Bietry, Publisher, "Bulletin Financier et Economique de l'Indochine," Saigon, Indo-China.
- DECEMBER 17. The California Academy of Sciences Expedition to the Gulf of California (illustrated), by Mr. Joseph R. Slevin, Assistant Curator, Department of Herpetology, California Academy of Sciences.

The Academy, through the co-operation of the National Geographic Society, the San Diego Society of National History and the Scripps Institution for Biological Research, was able to take advantage of the courteous offer of the Government of Mexico and visited the islands off the coast of Lower California to ascertain the status of the fur seal, the sea otter and the elephant seal, which, it was known, formerly occurred in those waters.

The fish patrol boat "Tecate" of the Mexican Government was placed at the disposal of the expedition without cost. The results of the expedition will be noted in the reports of the Director and of the Curators of the Museum. I desire merely to state that the total cost of this expedition, including all expenses and services of those who participated, was \$1,917.42 which was shared as follows:

National Geographic Society	\$500.00
San Diego Society of National History	355.44
Scripps Institution for Biological Research	264.64
California Academy of Sciences	797.34

The Grizzly Bear Habitat Group, which, as noted in last year's report, was made possible by a generous donation from Mr. Ogden Mills, has been completed and was opened to the public on March 12, 1922. With this installation the available space for the large-size habitat groups has

been exhausted and any further installations must await the acquisition of more building space.

To the Antelope Fund and for Conservation of Wild Animal Life there have been contributed during the year \$461.48. This amount has enabled the Academy's Committee to continue its effective work in conservation.

The Academy has been fortunate in acquiring a collection of reptiles and batrachians of the Philippine Islands made by Edward H. Taylor. The acquisition of this collection was made possible by the generosity of two Academy members, Mr. W. H. Crocker, who contributed \$4500 and Mr. Herbert Fleishhacker who contributed \$500 toward the cost price of \$5000.

A balance due on the purchase of the Prager Herbarium, the acquisition of which was noted a year ago, in the amount of \$146.53 was contributed by Mr. Wm. F. Herrin and Mr. Wm. H. Crocker.

The Academy received, too, from Mr. Wm. F. Herrin \$100 to be applied on the purchase of containers for the Taylor collection of reptiles, and since the close of the year further donations for this purpose have been received as follows:

From C. O. G. Miller	\$100.00
From Selah Chamberlain	100.00
From Louis F. Montegale	50.00
From George Uhl	20.00

The current receipts of the Academy were made up of rent in the sum of \$72,669; dues, \$3455; post card sales, \$1274; interest, \$1461; and a small amount from sales of publications and the like. The total receipts for the year aggregated about \$79,500 apart, of course, from the funds handled in trust for the Steinhart Aquarium. The Academy has had need for all its income. If it had had more it would have increased the publication of scientific papers. It has, however, been found possible to apply another \$10,000 on the mortgage on the Commercial Building, thus reducing the same to \$270,000. The outgo for interest has been \$16,453.

Work on the Steinhart Aquarium has progressed steadily and the building is now nearing completion. The wisdom of deferring construction for a time has now been fully demonstrated. The prices of materials and the wage scale fell considerably from the high peak of 1920 so that more could be accomplished than would otherwise have been possible, and, in the meantime, the available fund has grown from the original \$250,000 to an aggregate of a little over \$300,000.

The City will now be asked to make the necessary provision for operating expenses so that the public may enter upon full enjoyment of the aquarium early in the next fiscal year.

The Academy has been the recipient of many donations and contributions to its store of scientific material during the year and I take this occasion to express, on behalf of the Academy, the assurance of sincere appreciation to the generous donors of funds as already noted, as well as to those who have contributed scientific material, or of their time and knowledge.

Among the donations of special note are 13 beautifully mounted heads of wild game animals, including moose, elk, deer, mountain sheep, etc., presented on June 14, 1922, by Mr. George C. Beckley. This is a remarkable collection of hunting trophies easily representing an outlay of \$10,000 to \$12,000. They have been installed in the Mammal Hall of the Museum where they form a most attractive exhibit.

From George Sturtevant and Roger Sturtevant of Oakland, California, the Academy received on December 15, 1922, as a donation, a valuable collection of books, shells, curios and carvings formerly belonging to the grandfather of the donors, the late J. N. Webster. The books included in this collection, comprising 369 volumes, constitute an important addition to the Academy's library.

The Academy has also received during the past year a valuable contribution from Miss Alice Eastwood, the Curator of the Department of Botany. This was in the nature of the employment of Ivan M. Johnston to identify the specimens and prepare the report of the Botanical Section of the Academy's Gulf of California expedition. The ex-

pense involved in the preparation of this report amounting to \$640 was defrayed entirely by Miss Eastwood.

The officers of the Academy have to thank the membership for loyal support in their efforts to make the Academy useful to the public, and they desire particularly to acknowledge the faithful and efficient service which has been rendered by the Curators of the Academy's various departments and they recognize and appreciate the willingness of all that are connected with the Academy's activities to do whatever is in their power to make these activities successful.